NON-PROLIFERATION OF NUCLEAR WEAPONS

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Computers rule OK. That is, when it comes to nuclear weapons. While nuclear testing has been declared almost beyond the pale, and has been protested at Moruroa and Lop Nor with unprecedented vigor this year as an archaic icon of the Cold War, computer simulation to upgrade and develop new nuclear weapons is alive and well.

Perhaps the "c" word sounds more friendly, more modern, cleaner to the late 20th century ear than "tests". When the US offered to help France develop computer simulation in August rather than resume testing in the South Pacific, few objections were raised. In fact, the US had already promised France giant supercomputers and is itself developing a $1 billion facility in California "to simulate the flow of radiation in a nuclear weapons fireball and a $400 million test centre at Los Alamos to take photogarphs "of the inner workings of mock weapons as they are detonated."

But a nuclear weapon, whether developed in the "virtual reality" of a super computer in a lab or by physical tests under a fragile atoll in the South Pacific is still a weapon of horrific mass destruction, which would cause a human and environmental catastrophe of unprecedented scale if ever used. Only a commitment to ban all tests and experiments that serve to upgrade and enhance nuclear weapons--in all environments including the information environment--will truly stop nuclear weapons proliferation.

The goal of a comprehensive test ban treaty has never been to ban tests solely because they were dirty. It was to throw into reverse the engine of the nuclear arms race: to ban tests because they were vital to ensure new generations of more lethal, more accurate, more precise nuclear bombs. It is perhaps not surprising that the nuclear weapon states are--with the exception of renegades France and China--prepared to stop testing underground at precisely the point when computer simulation has made the need for such tests at the very least questionable.

The final aim for the international community in promoting a test ban treaty was to start a process leading to the prohibition, dismantling and ultimate elimination of all nuclear weapons. This was not the dream of hippies or peace freaks. It was a set of detailed objectives laid out in the 1970 Nuclear Non-Proliferation Treaty (NPT) and reaffirmed in May this year when the international community adopted a set of "Principles and Objectives" for nuclear disarmament at NPT talks in New York. Diplomats unanimously called for "the determined pursuit by the nuclear-weapon States of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goals of eliminating those weapons". The nuclear powers also promised not to threaten or use nuclear weapons against non-nuclear countries.

Three days later, China exploded a nuclear bomb; one month later, President Chirac announced French testing would resume at Moruroa. In September, reports surfaced that the US, in spite of its claims that it has no new nuclear weapons under production, plans to introduce an upgraded version of the B61 nuclear bomb intended for earth-penetration missions to knock out bunkers or storage facilities housing chemical weapons or other weapons of mass destruction. All these activities contradict the pledges made by the nuclear powers at the NPT talks in May.

And they indicate that the post-Cold War battle over the future of nuclear weapons is far from over.

This battle does not revolve solely around the technology required to develop and produce new bombs. The expansion of concepts and strategies is equally a point of debate: between those who believe that it is now time to bury the concept of nuclear deterrence, and those who want to find new roles and reasons for nukes. The Eurobomb debate sparked by President Chirac's offer to Germany and other EU states of France's nuclear protection is one aspect of this desire to create a new rationale for nuclear weapons; the threatened expansion of NATO's nuclear umbrella into Eastern Europe is another. New strategies being developed by the military in the US, UK, France and Russia aim at replacing the "Russian threat" by targetting as yet unnamed and unknown "rogue states" suspected to be developing chemical, biological or nuclear weapons of their own. Nuclear hawks in Europe and the US are thus seeking to expand the role of nuclear deterrence and develop new strategies, and with this move shape new generations of nuclear weapons to fufil these new missions.

The new frontier for nuclear weapons is not just technological, then, it is deeply political. A Comprehensive Test Ban Treaty, no matter how long its gestation has been awaited and welcomed, will not effectively halt nuclear proliferation unless it both blocks new technological means of developing nuclear weapons and sets a signpost for further nuclear disarmament. The preamble to the Treaty must clearly reaffirm the international community's commitment to the elimination of nuclear weapons by proposing further steps toward the elimination of nuclear weapons, such as a ban on the production of plutonium and all other nuclear weapons-usable fissile material and a convention banning the development and production of nuclear weapons. The CTBT must condemn ANY technologies that will enable new nuclear weapons to be "tested" and re-assert the non-proliferation goal of such an agreement. If President Chirac and President Clinton think that the millions of people around the world who have protested against testing at Moruroa and Lop Nor will turn a blind eye when new bombs are wheeled out of the proposed French computer simulation facility in Bordeaux or from nuclear weapons labs in the US in a few years time, they should think again.